## TWO HITHERTO UNNAMED POPULATIONS OF AECHMOPHORUS (AVES: PODICIPITIDAE)

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Abstract. — The Mexican nesting populations of Aechmophorus occidentalis are named A. o. ephemeralis, and the larger birds of the northern populations of Aechmophorus clarkii in the United States and Canada are named A. c. transitionalis.

The Western Grebe (Aechmophorus occidentalis) was named as Podiceps occidentalis by Lawrence (1858:892, 894), from "Pacific coast from Washington Territory to California" (=Fort Steilacoom, Washington, fide American Ornithologists' Union Checklist, 6th Edition [1983]). On the following page Lawrence described Podiceps clarkii. These were dark-backed, dark-lored and pale-backed, white-lored forms, respectively. Two of the three specimens of clarkii listed by Lawrence were wintering birds from California of the large, pale morph that occurs throughout the range of the species in the United States and Canada. Deignan (1961:7-8) pointed out that the third specimen, from Laguna Santa Maria, Chihuahua, should be considered the type of P. clarkii, and Dickerman (1963) redundantly so restricted the type locality. The critical differences between the two morphs are the yellow-orange bill and white face of the pale morph, and darker bill and black face of the dark morph (Storer 1965); but all color characters are highly variable (Storer and Nuechterlein 1985).

Podiceps clarkii was considered a synonym of A. occidentalis until 1963, when Dickerman (1963) demonstrated the lack in overlap in wing chord measurements (and very little overlap in bill length) between northern and Mexican populations, and recognized clarkii as a small subspecies with pale and dark morphs as in nominate occidentalis. Mayr and Short (1970:29) overlooked or ignored the 1963 paper, stating "no races are recognized."

Later, Dickerman (1973) further characterized the small Mexican subspecies. He also pointed out that there was a degree of geographical segregation of the two morphs, in that more specimens from the central plateau and northern Mexico were of the pale type, while more from the western and southern portions of the plateau were of the dark morph. However, the trenchant characteristic of the Mexican versus northern populations is the small size of Mexican birds.

In the ensuing years, studies of the breeding behavior of northern populations (see review in Storer and Nuechterlein 1985) indicated than an apparently significant degree of assortative mating occurs between the two morphs. Based on this, the American Ornithologists' Union Committee on Classification and Nomenclature (AOU 1985) concluded that the two color morphs should be recognized by the specific names Aechmophorus occidentalis and A. clarkii. This decision was made in the absence of studies of the critical Mexican populations. and is contrary to recommendations published earlier in the same volume of the Auk (Storer and Nuechterlein 1985). Further, starch gel electrophoresis revealed no significant difference between the two color morphs in preliminary studies (Ratti 1979).

In view of the AOU Committee's decision, and in view of the great size disparity between birds of the northern and southern populations, it now becomes necessary to name the large pale northern population and the small dark southern population. These may now be known as:

### Aechmophorus occidentalis ephemeralis, new subspecies

Holotype. – Adult male, American Museum of Natural History 708,559, collected at Laguan de San Pedro Lagunillas, Nayarit, Mexico, 25 May 1962 by Robert W. Dickerman; field number RWD 10650. Additional data: with a large young; weight 1050 gms.; pectoral muscles 17 and 16.3 gms.; moderately to rather fat; extent 851 mm.; wing chord 179 mm., culmen (from anterior edge of nostril) 56.7 mm., tarsus 70.4 mm.

*Diagnosis.*—Small, inseparable in size from the co-existing population of *A. clarkii*, but dark-lored as in nominate *occidentalis*.

*Distribution.*—Specimens recorded to date from Nayarit, western Jalisco, Puebla and Guererro (Dickerman 1973).

# Aechmophorus clarkii transitionalis, new subspecies

Holotype. – Adult male, National Museum of Natural History 158016, collected at Silver Lake, Lake County, Oregon, 22 Jun 1897 by Vernon Bailey; original number 20. Additional data: wing cord 194 mm., culmen (from anterior edge of nostril) 63.4 mm., tarsus 77.5 mm.

Diagnosis. – Large, similar in size to nominate A. occidentalis, but coloration pale as in A. clarkii.

Distribution.—Sympatric with A. o. occidentalis in western North America, north of the Mexican border, becoming rarer northwards.

Discussion. - For detailed size comparison of nominate A. o. occidentalis and A. clarkii transitionalis see Storer and Nuechterlein (1985).

### Acknowledgments

I thank M. Ralph Browning for his selection and measurement of the type of *A. clarkii transitionalis,* and Kenneth C. Parkes and Robert W. Storer for their comments on the manuscript.

### Literature Cited

- American Ornithologists' Union. 1983. American Ornithologists' Union Checklist of North American Birds, 6th Edition. xxix + 877 pp., American Ornithologists' Union, Washington, D.C.
- ——. 1985. Thirty-fifth Supplement to the American Ornithologists' Union Checklist of North American Birds.—Auk 102:680–686.
- Deignan, H. G. 1961. Type specimens in the United States National Museum. – Bulletin of the United States National Museum 221:1–718.
- Dickerman, R. W. 1963. The Grebe Aechmophorus occidentalis clarkii as a nesting bird of the Mexican Plateau. – Condor 65:66–67.
- . 1973. Further notes on the Western Grebe in Mexico.—Condor 75:131–132.
- Lawrence, G. H. 1858. In Baird, Cassin, and Lawrence, Report of Explorations and Surveys, Railroad Mississippi Pacific 9:894–895.
- Mayr, E., and L. Short. 1970. Species taxa of North American Birds.—Publication of the Nuttall Ornithological Club 9:1–127.
- Ratti, J. T. 1979. Reproductive separation and isolating mechanisms between sympatric dark- and light-phased Western Grebes. — Auk 96:573–586.
- Storer, R. 1965. The color phases of the Western Grebe. Living Bird 6:59-63.
- —, and G. L. Nuechterlein. 1985. An analysis of plumage and morphological characters of the two forms of the Western Grebe (*Aechmophorus*).—Auk 102:102–119.

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